Work Order ID 112032

112032

Tuesday, January 28, 2014 1:41:30 PM

Item ID: D4885-1 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: End Fitting

Start Date: 1/28/2014 **Start Qty:** 4.00 *4*

Required Date: 2/14/2014 **Req'd Qty:** 4.00 *4*

Reference:

Cust Item ID:

Customer:

Approvals: **Process Plan:** mnf. **Date:** 14-1-28 **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr D4885	**Revision Nbr** Rev A								
100		0.00							
100						MJ	14/1/30		
Outsource5	**Memo**	0.00							
Outsource process - Machining	ISSUE P/O: 22838 POSSIBLE SUPPLIER:ATG C OF C IS REQUIRED								
110	QC6- Inspect dimensions to drawing	0.00							
110						4			
QC	**Memo**	0.00							
Quality Control									
150		0.00							
150	PURCHASING								
Purchasing	**Memo**	0.00							
Purchasing	Issue P/O: _____ LPI Per ASTM 1417 LEVEL 2 Certificate of conformaty is required								

DAS 27 9-89 14/3/24

DAS 27 9-89 N/A

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework	☐
Scrap	☐
Use-as-is	☐
Suspected Unapproved	☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐
Machining ☐	Small Fab ☐	Prod. Eng. Coor. ☐	Quality ☐
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐
Large Fab ☐	Composite ☐	Supplier ☐	

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

- ☐ Bending
- ☐ Centre Not Concentric
- ☐ Cracks
- ☐ Crimp/Kink/Ripple/Wave
- ☐ Cuffs
- ☐ Crushing
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Marks/Chatter
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

General

- ☐ Bend
- ☐ BOM/Route
- ☐ Broken/Damage/Defect
- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drawing
- ☐ Drill Holes
- ☐ Finish
- ☐ Fit/Function
- ☐ Folio/Program
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete/Unqualified
- ☐ Instructions Incomplete/Unclear
- ☐ Misaligned/off center
- ☐ Mislabeled
- ☐ Misread
- ☐ Off-set
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Set-up
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

Work Order ID 112032

Tuesday, January 28, 2014 1:41:30 PM

112032

Item ID: D4885-1 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: End Fitting

Start Date: 1/28/2014 **Start Qty:** 4.00 *4*

Required Date: 2/14/2014 **Req'd Qty:** 4.00 *4*

Reference:

Cust Item ID:

Customer:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	Receive & Inspect for Damage & Mat'l Certs	0.00							
160									
Packaging	**Memo**	0.00							
Packaging	Ensure certificate of conformity is attached								
190	QC21- Final Inspection - Work Order Release	0.00							
190									
QC	**Memo**	0.00							
Quality Control									

4x SP 14-3-24.

DAS 06 9-89

Loc ST 139A

4x MAR 24 2014

MCJ 14-03-25

MCJ 14-03-24

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function
☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence
☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other

Picklist Print

Tuesday, January 28, 2014 1:41:29 PM

1

Work Order ID: 112032
Parent Item: D4885-1
Parent Item Name: End Fitting

Start Date: 1/28/2014 **Required Date:** 2/14/2014
Start Qty: 4.00 **Required Qty:** 4.00

Comments: IPP REV:A NEW ISSUE JLM 14-01-28 VERIFIED BY:JFS

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4885-1P End Fitting		Purchased	No				Each	0.0000		4	4x	SP 14-3-24.	
M174PH-H900R2.000 17-4SS H900 ROUND BAR 2.000		Purchased	No				f	6.0000		2	C2 14/01/30		

Location	Loc Qty	Loc Code	
MAT031	6		
M127334 ✓	6		2

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐ ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

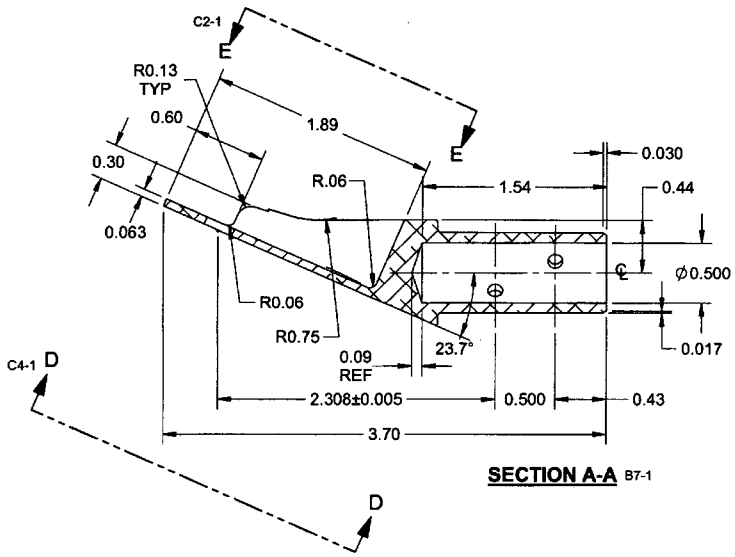
FAULT CATEGORY

Landing Gear

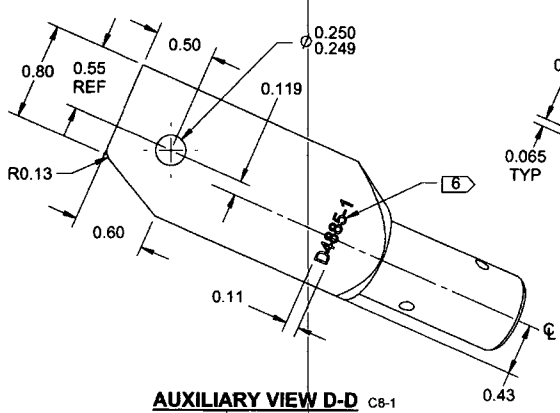
☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

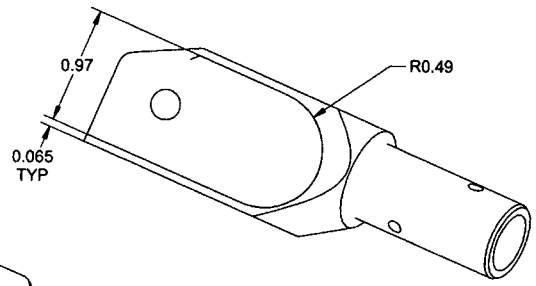
☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function
☐ Folio/Program
☐ Grain
☐ Hardware
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☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other



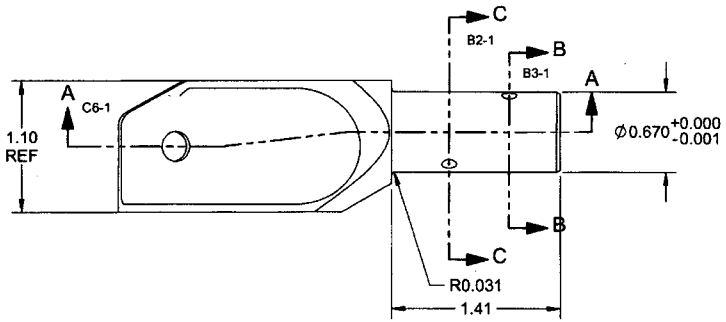
SECTION A-A B7-1

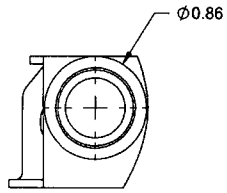


AUXILIARY VIEW D-D C8-1

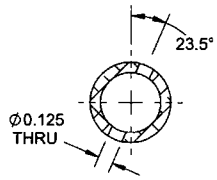


AUXILIARY VIEW E-E D7-1

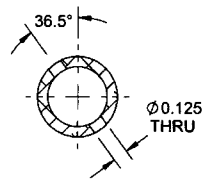




D4885-1 END FITTING



SECTION B-B B6-1



SECTION C-C B6-1

#112032
14-1-30

2013-12-12

NOTES:
1) MATERIAL: 17-4 PH/S17400/TYPE 630 SS ROUND BAR, H900 CONDITION
PER AMS 5643/ASTM A564
DART SPEC M17-4-R
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY PER QSI 044 6.3.
ENGRAVE P/N USING 0.11 HIGH LETTERS TO A MAX. DEPTH OF 0.010
7) WEIGHT: 0.21 lbs
8) LIQUID PENETRANT INSPECT PER QSI 038 6.1.1 (ASTM E1417 LEVEL 2)

REV.	DESCRIPTION	BY	DATE
A	NEW ISSUE	RF	13.09.16

APPROVED

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN	RF	
CHECKED	DC	DRAWING NO. D4885 REV. A
MFG. APPR.	JLM	SHEET 1 OF 5
APPROVED	HS	TITLE END FITTING SCALE NTS
DE APPR.	DS	
DATE	13.12.01	

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DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐ ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

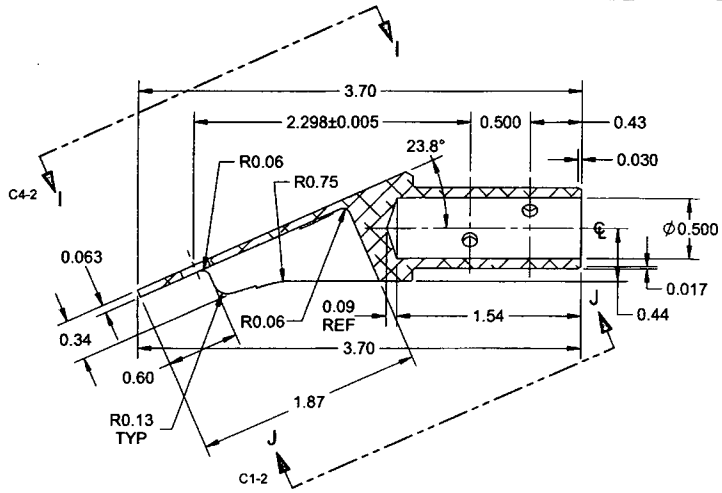
FAULT CATEGORY

Landing Gear

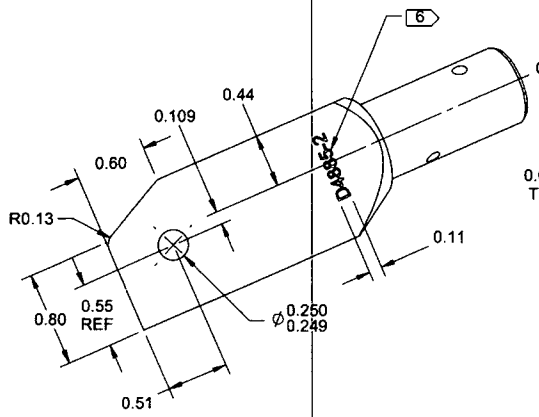
☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

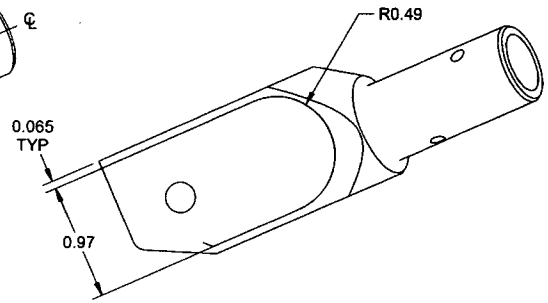
☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function
☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
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☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other



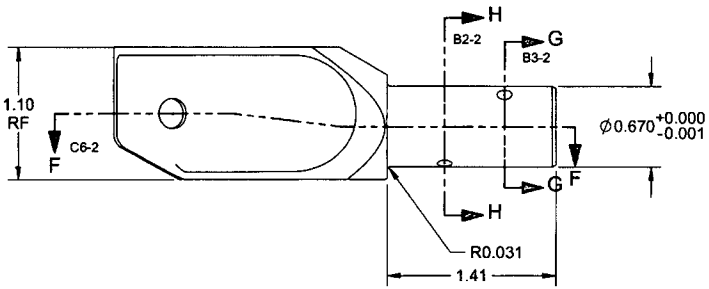
SECTION F-F B8-2

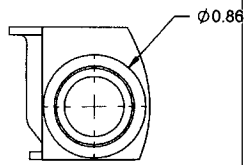


AUXILIARY VIEW I-I D8-2

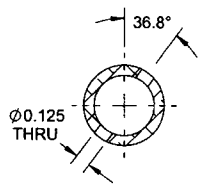


AUXILIARY VIEW J-J C7-2

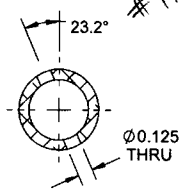




D4885-2 END FITTING



SECTION G-G B6-6



SECTION H-H B6-6

#112032

NOTES:
1) MATERIAL: 17-4 PH/S17400/TYPE 630 SS ROUND BAR, H900 CONDITION
PER AMS 5643/ASTM A564
DART SPEC M17-4-R
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY PER QSI 044 6.3.
ENGRAVE P/N USING 0.11 HIGH LETTERS TO A MAX. DEPTH OF 0.010
7) WEIGHT: 0.22 lbs
8) LIQUID PENETRANT INSPECT PER QSI 038 6.1.1 (ASTM E1417 LEVEL 2)

2013-12-12

APPROVED			
DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	DC	DRAWING NO. D4885	REV. A
MFG. APPR.	JLM		SHEET 2 OF 5
APPROVED	HS	TITLE END FITTING	SCALE NTS
DE APPR.	DS		
DATE 13.12.01			

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DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework	☐
Scrap	☐
Use-as-is	☐
Suspected Unapproved	☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐
Machining ☐	Small Fab ☐	Prod. Eng. Coor. ☐	Quality ☐
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐
Large Fab ☐	Composite ☐	Supplier ☐	

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

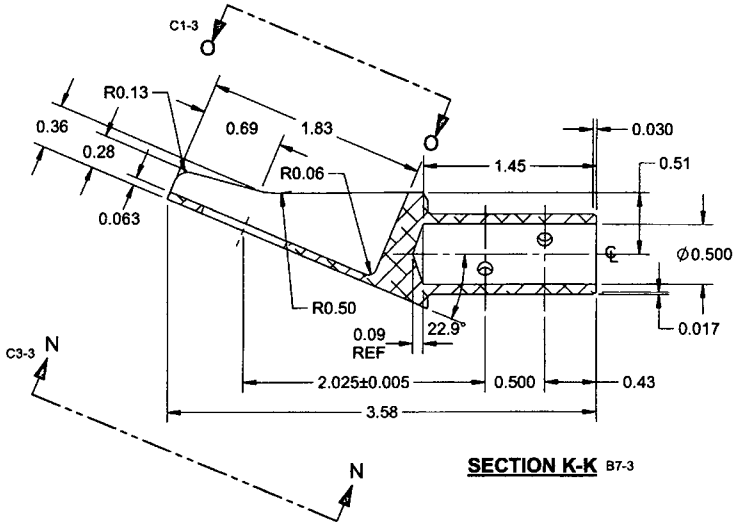
FAULT CATEGORY

Landing Gear

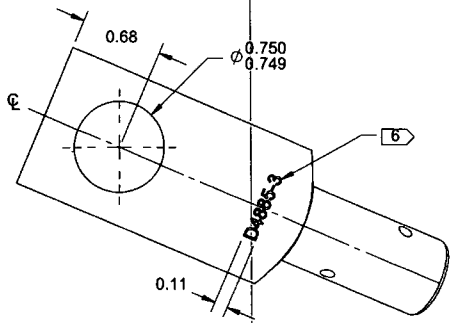
- ☐ Bending
- ☐ Centre Not Concentric
- ☐ Cracks
- ☐ Crimp/Kink/Ripple/Wave
- ☐ Cuffs
- ☐ Crushing
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Marks/Chatter
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

General

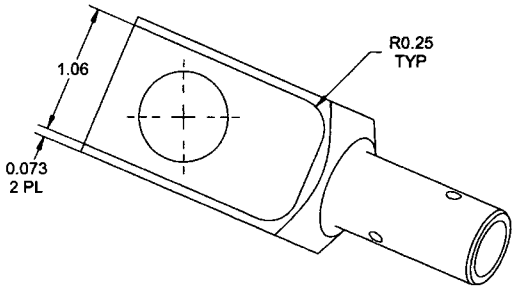
- ☐ Bend
- ☐ BOM/Route
- ☐ Broken/Damage/Defect
- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drawing
- ☐ Drill Holes
- ☐ Finish
- ☐ Fit/Function
- ☐ Folio/Program
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete/Unqualified
- ☐ Instructions Incomplete/Unclear
- ☐ Misaligned/off center
- ☐ Mislabeled
- ☐ Misread
- ☐ Off-set
- ☐ Out of Calibration
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- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Set-up
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other



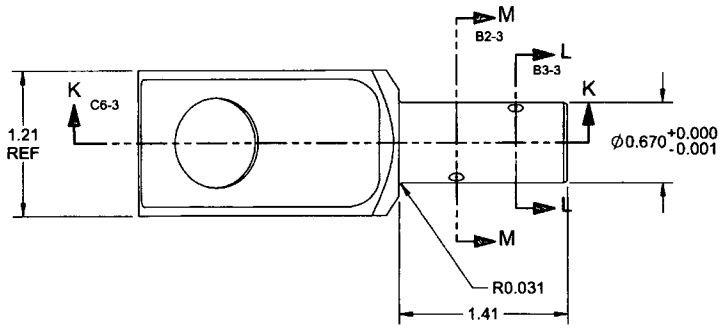
SECTION K-K B7-3

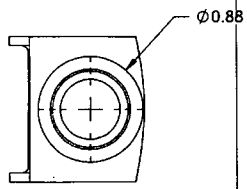


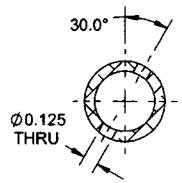
AUXILIARY VIEW N-N C8-3



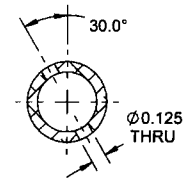
AUXILIARY VIEW O-O D7-3







SECTION L-L B6-3



SECTION M-M B6-3

#112032

D4885-3 END FITTING

NOTES:
1) MATERIAL: 17-4 PH/S17400/TYPE 630 SS ROUND BAR, H900 CONDITION
PER AMS 5643/ASTM A564
DART SPEC M17-4-R
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY PER QSI 044 6.3.
ENGRAVE P/N USING 0.11 HIGH LETTERS TO A MAX. DEPTH OF 0.010
7) WEIGHT: 0.22 lbs
8) LIQUID PENETRANT INSPECT PER QSI 038 6.1.1 (ASTM E1417 LEVEL 2)

2013-12-12

APPROVED			
DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	DC	DRAWING NO. D4885	REV. A
MFG. APPR.	JLM		SHEET 3 OF 5
APPROVED	HS	TITLE END FITTING	SCALE NTS
DE APPR.	DS		
DATE 13.12.01			

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DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

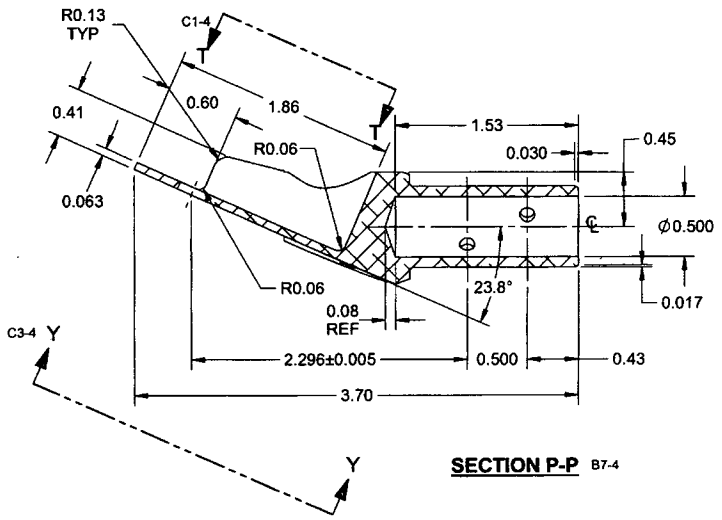
FAULT CATEGORY

Landing Gear

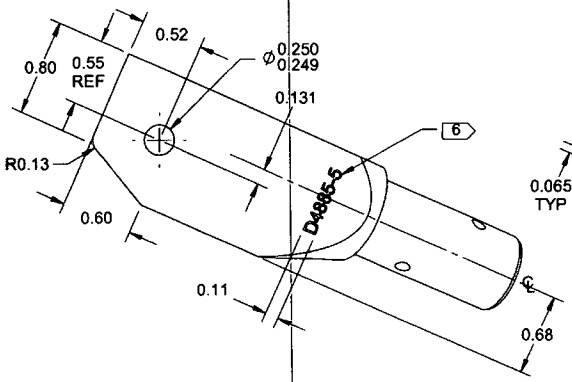
☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

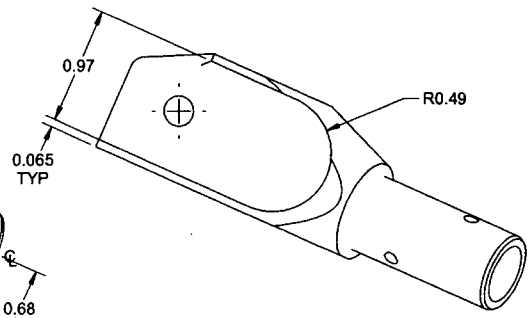
☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function
☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence
☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other



SECTION P-P B7-4

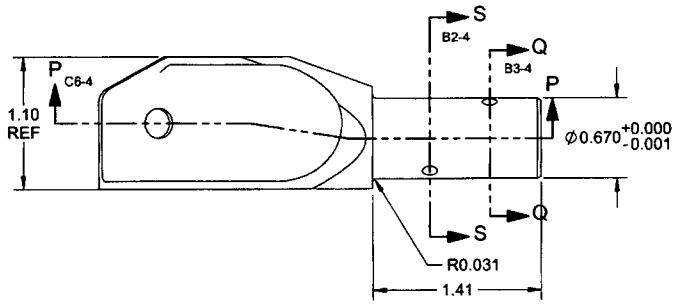


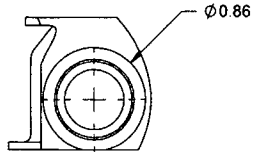
AUXILIARY VIEW Y-Y C8-4



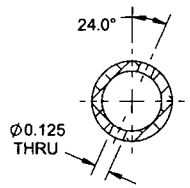
AUXILIARY VIEW T-T D7-4

#112037

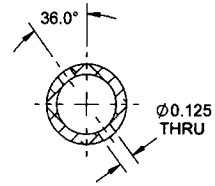




D4885-5 END FITTING



SECTION Q-Q B6-4



SECTION S-S B6-4

RELEASED
2013-12-12
MP

NOTES:
1) MATERIAL: 17-4 PH/S17400/TYPE 630 SS ROUND BAR, H900 CONDITION
PER AMS 5643/ASTM A564
DART SPEC M17-4-R
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY PER QSI 044 6.3.
ENGRAVE P/N USING 0.11 HIGH LETTERS TO A MAX. DEPTH OF 0.010
7) WEIGHT: 0.21 lbs
8) LIQUID PENETRANT INSPECT PER QSI 038 6.1.1 (ASTM E1417 LEVEL 2)

APPROVED

DESIGN	RF	**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA
DRAWN	RF	
CHECKED	DC	DRAWING NO. D4885 REV. A
MFG. APPR.	JLM	SHEET 4 OF 5
APPROVED	HS	TITLE END FITTING SCALE NTS
DE APPR.	DS	
DATE 13.12.01		

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DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐ ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

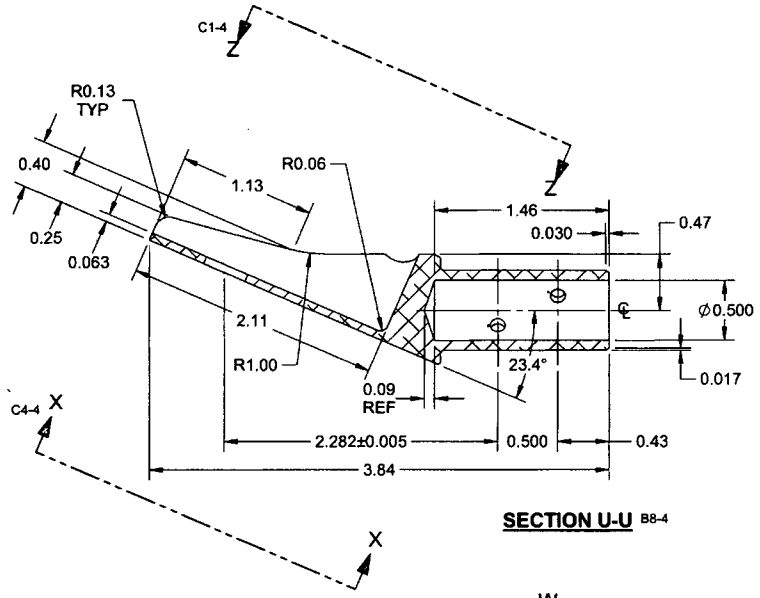
☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function

☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence

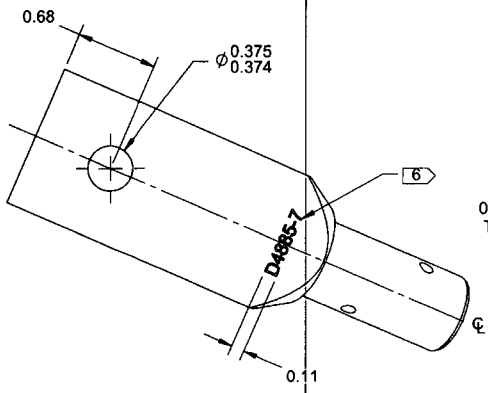
☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge

☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled

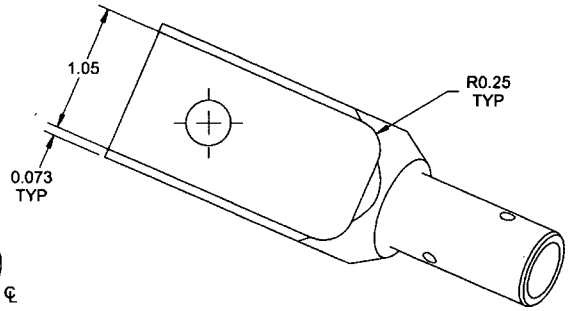
☐ Other



SECTION U-U B8-4

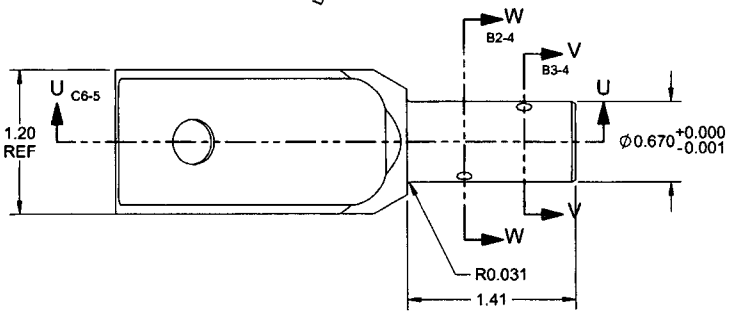


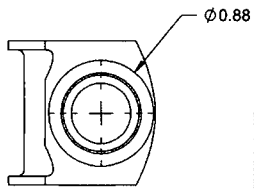
AUXILIARY VIEW X-X C8-4



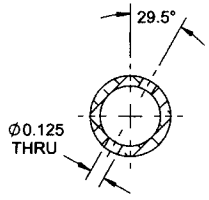
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AUXILIARY VIEW Z-Z D7-4

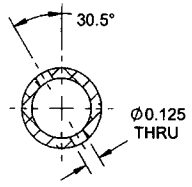




D4885-7 END FITTING



SECTION V-V B6-4



SECTION W-W B6-4

NOTES:
1) MATERIAL: 17-4 PH/S17400/TYPE 630 SS ROUND BAR, H900 CONDITION
PER AMS 5643/ASTM A564
DART SPEC M17-4-R
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY PER QSI 044 6.3.
ENGRAVE P/N USING 0.11 HIGH LETTERS TO A MAX. DEPTH OF 0.010
7) WEIGHT: 0.22 lbs
8) LIQUID PENETRANT INSPECT PER QSI 038 6.1.1 (ASTM E1417 LEVEL 2)

DJ 2013-12-17

APPROVED	DESIGN	RF	DART AEROSPACE LTD
	DRAWN	RF	HAWKESBURY, ONTARIO, CANADA
	CHECKED	DC	DRAWING NO. D4885 REV. A
	MFG. APPR.	JLM	SHEET 5 OF 5
	APPROVED	HS	TITLE END FITTING SCALE NTS
	DE APPR.	DS	
	DATE	13.12.01	

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DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function
☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence
☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other

A.T.G. INDUSTRIES INC.
731 INDUSTRIELLE STREET
ROCKLAND, ON K4K 1T2
Canada

Ph: (613) 446-4544
Fax: (613) 446-4556

Pack List

Number: 907587 Date: 19-Mar-14

To

DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7
Canada

Ph: 613 632-9577 Fax: 613 632-1053

Ship To

Michael Gregoire
DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7
Canada

Ph: 613 632-9577 Fax: 613 632-1053

Terms	Ship Via

Quantity	Description		
	PLEASE REFERENCE THE PACK LIST NUMBER ON ALL CORRESPONDENCE TO THIS SHIPMENT. IF YOU HAVE ANY QUESTIONS, PLEASE CALL AT (613) 446-4544.		
4 ea	Part: D4885-1P END FITTING Job: 15704	PO: PO22838	Rev: A Line: 1
3 ea	Part: D4871-3P END FITTING Job: 15714	PO: PO22838	Rev: A Line: 11
5 ea	Part: D4870-1P END FITTING, SMALL Job: 15718	PO: PO22838	Rev: A Line: 15
5 ea	Part: D4884-3P END FITTING, EYE Job: 15721	PO: PO22838	Rev: A Line: 18
4 ea	Part: D4885-2P END FITTING Job: 15705	PO: PO22838	Rev: A Line: 2
6 ea	Part: D4885-3P END FITTING Job: 15706	PO: PO22838	Rev: A Line: 3

SP14-3-24.

DATE : 19 Mar 2014

CERTIFIED SIGNATURE: JAyotte

RECEIVER SIGNATURE : _____

CERTIFICATE OF CONFORMANCE

A.T.G. INDUSTRIES INC. CERTIFIES THAT ALL ITEMS IN THIS SHIPMENT ARE IN CONFORMANCE WITH THE REQUIREMENTS, SPECIFICATIONS, AND DRAWINGS REFERENCED IN THE ABOVE PURCHASE ORDER.

ATG INDUSTRIES INC.

731 INDUSTRIELLE ST.
ROCKLAND, ONTARIO
K4K 1T2

(613) 446-4544
(613) 446-4556 (FAX)

DATE: **March 19, 2014**

TO: **Dart Aerospace LTD**
1270 Aberdeen St.
Hawkesbury, ON K6A 1K7

SHIP VIA	P.O. NUMBER	SHIPPED VIA	F.O.B. POINT	TERMS
895327070RT	PO22838	OUR TRUCK	ATG	

QTY	PART NUMBER	REV	DESCRIPTION
1	D4885-2P	A	
			Ø.670 +.000 -.002 IS AT Ø.6684
			DRAWING
			TRAVELER 15705
			MADE IN CANADA

CERTIFICATE OF CONFORMANCE
ISO 9001 : 2008 REGISTERED

ATG Industries Inc. certifies that all items in this shipment are in conformance with the requirements, specifications, and drawings referenced in the above purchase order.

Signature: _____ **Date:** **March 19, 2014**

Received by: _____ **Date:** _____

A.T.G. INDUSTRIES INC.
731 INDUSTRIELLE STREET
ROCKLAND, ON K4K 1T2
Canada

Ph: (613) 446-4544
Fax: (613) 446-4556

Pack List

Number: 907587 Date: 19-Mar-14

To

DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7
Canada

Ph: 613 632-9577 Fax: 613 632-1053

Ship To

Michael Gregoire
DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7
Canada

Ph: 613 632-9577 Fax: 613 632-1053

Terms	Ship Via

Quantity	Description
	I.S.O. 9001 : 2008 REGISTERED / MADE IN CANADA

DART AEROSPACE

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO22838

Purchase Order Date 1/30/2014
PO Print Date 1/30/2014

Order From : VC-ATG001

A.T.G. INDUSTRIES INC.
731 INDUSTRIELLE ROAD
ROCKLAND, ON K4K 1T2
CANADA

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name		**Buyer**	Michael Gregoire
Vendor Phone	613-446-4544	**Customer POID**	
		Customer Tax #	10127-2607
Ship To Contact		**Terms**	Net 30
Ship To Phone		**Currency**	CAD
Ship Via:	VENDOR'S TRUCK	**FOB**	FCA – (Free Carrier)
Ship Acct:			

Line Nbr	Reference / Vendor Part Number / Line Comments / Delivery Comments	Description/ Mfg ID	Req Date/ Taxable / Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	D4885-1P	End Fitting	3/7/2014 Yes 3/7/2014		4.00 Each	$96.00	$384.00
	Manufacture as per drawing D4885 rev.A Made from 17-4SS H900 Round Bar 2.000" B112032						
						Line Total:	$384.00
2	D4885-2P	End Fitting	3/7/2014 Yes 3/7/2014		5.00 Each	$96.00	$480.00
	Manufacture as per drawing D4885 rev.A Made from 17-4SS H900 Round Bar 2.000" B112033						
						Line Total:	$480.00

recu 4 x

SP14-3-21

PO Instructions: Procurement Quality Clauses
A004 FAA-PMA /TSO
A005 RIGHT OF ENTRY
A008 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION SENT TO DART AEROSPACE)
A016 PERSONNEL QUALIFICATION
A024 PROCESS CERTIFICATIONS
A025 CERTIFICATE OF CONFORMANCE
A040 NOTIFICATION OF QUALITY ESCAPE
A041 QUALITY MANAGEMENT SYSTEM

First Article Inspection Report

ATG INDUSTRIES INC.

731 Industrielle St
Rockland, Ontario K4K 1T2
Ph: 613 446-4544

Customer:	Dart Aerospace	Date:	March 19th, 2014	450
Part Number:	D4885-1P	Revision:	A	
PO Number:	PO22838	Qty:	4	FAI No.

Item	Dimension	Measurement Inspected by: Rene Tougas, Q.C.	Remarks
1	1.54	1.545	Section A-A
2	.030	.031	
3	.44	.44	
4	Ø.500	.5015	
5	.017	.0175	
6	3.70	3.695	
7	.43	.443	
8	.500	.499	
9	2.308±.005	2.308	
10	23.7º	23.5º	
11	.09 REF	.117	
12	R.75	.75	
13	R.06	.06	
14	.063	.062	
15	.30	.302	
16	.60	.601	
17	R.13 TYP	.13	
18	1.89	1.892	
19	R.06	.06	
20	.50	.499	Auxiliary View D-D
21	Ø.250/.249	.2495	
22	.119	.119	
23	Note 6	✓	
24	.43	.428	
25	.11	.11	
26	.60	.602	
27	R.13	.13	
28	.80	.80	
29	.55 REF	.549	
30	R.49	.487	Auxiliary View E-E
31	.065 TYP	.062	
32	.97	.973	

First Article Inspection Report

ATG INDUSTRIES INC.

731 Industrielle St
Rockland, Ontario K4K 1T2
Ph: 613 446-4544

Customer:	Dart Aerospace	Date:	March 19th, 2014	450
Part Number:	D4885-1P	Revision:	A	
PO Number:	PO22838	Qty:	4	FAI No.

Item	Dimension	Measurement	Remarks
		Inspected by: Rene Tougas, Q.C.	
33	Ø.670+.000/-.001	.6699	
34	1.41	1.409	
35	R.031		
36	1.10 REF	1.097	
37	Ø.86	.860	
38	23.5º	23.5º	Section B-B
39	Ø.125 thru	Ø.125 thru	
40	36.5º	23.5º	Section C-C
41	Ø.125 thru	Ø.125 thru	
42	Material:	17-4SS H900 2.00" RD BAR	Supplied by Customer
43	Treatment:	Liquid Penetrant	PO#:

skyservice Work Order Traveler

Sky Service F.B.O. Inc.

DOT APP 53-89 / EASA 145.7142 / BDA AMO 385

WO #: MWO20265	**Customer:** Cash Sale	**Dept:** NDT YUL	**Reference:** 20140108
Descr:	**PN:**	**S/N:**	**Qty:** 1
Make:	**Model:**	**Reg:**	**A/C S/N:**
TSN: 0	**CSN:** 0	**TSO:** 0	

Task: UNSCHEDULED | **Sequence:** 1

Work Required:

CARRY OUT NDT ON 28 PARTS AS PER PO: 20140108

Action Taken:	Date:	Initial/Stamp:
LPI C/O AS PER ASTM E-1417M-13 NO CRACK FOUND PEN.(ZL-37 , B#10A070), CLEAN(SKC-S,B#09F21K),DEV.(SKD-S2,B#09L04K) EMU.(ZR-10B,B#10A074).	MAR 17 2014	DOT-APP 20 53-89

Description	*Location*	*P/N*	*Qty*	*Batch*	*S/N Off*	*S/N On*

I certified that the maintenance described above has been performed in accordance with the applicable standard of airworthiness.

Signature:	**ACA/SCA Stamp**	Date:
Name: RAFIK MELIKIAN	DOT-APP 20 53-89	MAR 17 2014